

Applicants have not amended the claims but include them below for the convenience of the Examiner.

Listing of Claims:

1-2. (Cancelled).

3. (Currently Amended) A method of ~~transcoding~~ dissimilar payloads, the method comprising:

demultiplexing, at a device, a first digital transport stream to recover first and second digital payloads that were each carried in the first digital transport stream prior to demultiplexing;

transporting the second digital payload to a transcoder whose output is connected to a multiplexer upon determining that a protocol associated with the second digital payload is not in a set of one or more supported protocols;

bypassing the transcoder and transporting the first digital payload to the multiplexer upon determining that a protocol associated with the first digital payload is in the set of one or more supported protocols;

determining whether a protocol associated with the second digital payload is dissimilar from a protocol associated with the first digital payload;

transcoding, at the transcoder, the second digital payload to the protocol associated with the first digital payload if the protocol associated with the second digital payload is determined to be dissimilar from the protocol associated with the first digital payload; and

multiplexing, at the multiplexer, the first digital payload and the transcoded second digital payload to a second digital transport stream.

4. (Previously Presented) The method of claim 3 wherein the protocol associated with the first digital payload is older than the protocol associated with the second digital payload, and the second digital payload is transcoded to the older protocol.

5. (Previously Presented) The method of claim 3 wherein the protocol associated with the first digital payload is less compressive than the protocol associated with the second digital payload, and the second digital payload is transcoded to the less compressive protocol.

6. (Cancelled)

7. (Previously Presented) The method of claim 3 further comprising decrypting conditional access (CA) encryption of the first digital transport stream prior to demultiplexing.

8. (Previously Presented) The method of claim 7 further comprising decrypting the CA encryption of the first digital transport stream in a settop box (STB).

9. (Previously Presented) The method of claim 3 wherein the steps of demultiplexing the first digital transport stream, transcoding the second digital payload, and multiplexing the first and transcoded second digital payloads occur in a card inserted into a card slot of a first interface device.

10. (Previously Presented) The method of claim 9 further comprising decoding copy protection of the first digital transport stream in the card and prior to the demultiplexing, transcoding, and multiplexing.

11. (Previously Presented) The method of claim 10 further comprising encoding copy protection to the second digital transport stream.

12. (Previously Presented) The method of claim 11 further comprising transmitting the copy protection encoded second digital transport stream from the card to the first interface device.

13-28. (Cancelled).

29. (Previously Presented) A method, comprising:

demultiplexing, at a device, a first digital transport stream to recover a plurality of first digital payloads and a plurality of second digital payloads that were each carried in the first digital transport stream prior to demultiplexing, each of the first digital payloads being formatted according to a first protocol, and each of the second digital payloads being formatted according to a second protocol;

transcoding each of the second digital payloads to be formatted according to a protocol that depends upon the first protocol; and

multiplexing the first digital payloads with the transcoded second digital payloads into a second digital transport stream.

30. (Previously Presented) The method of claim 29, further comprising:

prior to demultiplexing, decoding the first digital transport stream to remove copy protection; and

after multiplexing, encoding the second digital transport stream to be copy protected.

31. (Previously Presented) The method of claim 30, further comprising:

prior to demultiplexing and prior to decoding, encoding the first digital transport stream to be copy protected;

after multiplexing and after encoding the second digital transport stream, decoding the second digital transport stream to no longer be copy protected; and

after decoding the second digital transport stream, demultiplexing the second digital transport stream to recover the first and transcoded second digital payloads.

32. (Previously Presented) An apparatus, comprising:

a first demultiplexor configured to demultiplex a first digital transport stream to recover a plurality of first digital payloads and a plurality of second digital payloads that were each carried in the first digital transport stream prior to demultiplexing, each of the first digital payloads being formatted according to a first protocol, and each of the second digital payloads being formatted according to a second protocol;

a transcoder configured to transcode each of the second digital payloads in a manner that depends upon the first protocol; and

a multiplexor configured to multiplex the first digital payloads with the transcoded second digital payloads into a second digital transport stream.

33. (Previously Presented) The apparatus of claim 32, further comprising:

a first copy protection decoder configured to decode the first digital transport stream to remove copy protection; and

a first copy protection encoder configured to encode the second digital transport stream received from the multiplexor to be copy protected.

34. (Previously Presented) The apparatus of claim 33, further comprising:

a second copy protection encoder configured to encode the first digital transport stream to be copy protected and transmit it to the first copy protection decoder;

a second copy protection decoder configured to decode the second digital transport stream received from the first copy protection encoder, so as to no longer be copy protected; and

a second demultiplexor configured to demultiplex the second digital transport stream received from the second copy protection decoder, to separate the first digital payloads from the second digital payloads.

35. (Previously Presented) The apparatus of claim 32, wherein the demultiplexor, the transcoder, and the multiplexor are on a first hardware module that is configured to be inserted into a receiver device that is configured to decode digital payloads formatted according to the second protocol.

36. (Previously Presented) The apparatus of claim 33, wherein the demultiplexor, the transcoder, the multiplexor, the first copy protection encoder, and the first copy protection decoder are on a first hardware module that is configured to be inserted into a second hardware module that is configured to decode digital payloads formatted according to the second protocol.

37. (Previously Presented) The apparatus of claim 34, wherein the demultiplexor, the transcoder, the multiplexor, the first copy protection encoder, and the first copy protection decoder are on a first hardware module that is configured to communicate with a second hardware module that contains the second copy protection encoder, the second copy protection decoder, and the second demultiplexor.

38. (Previously Presented) The method of claim 29, further comprising transmitting the

second digital transport stream to a device that is configured to receive digital transport streams containing digital payloads formatted according to the first protocol.